

Please amend claims 1, 13-15, 21, 22, 24, 30, 31, 34, 35, and 37 to read as follows:

1 (Once amended). A method for isolating plasmid DNA from genomic DNA in a DNA containing material which comprises plasmid DNA and genomic DNA, comprising the steps of:

- (i) extracting the plasmid DNA into butanol by mixing the material with butanol, a chaotrope, and water under conditions to denature the genomic DNA and forming an aqueous phase and a butanol phase, wherein the genomic DNA is substantially in the aqueous phase and the plasmid DNA is substantially in the butanol phase; and
- (ii) recovering the plasmid DNA from the butanol.

13 (Twice amended). A method for isolating plasmid DNA from a DNA containing material which comprises plasmid DNA and genomic DNA, comprising the steps of:

- i. extracting the plasmid DNA into butanol by mixing the material with butanol, a chaotrope, and water under conditions to denature the genomic DNA, wherein the chaotrope is present at a concentration of from 0.7M to 1.2M based on the combination of butanol, chaotrope and water; and
- ii. recovering the plasmid DNA from the butanol.

14 (Once amended). A method for isolating plasmid DNA from a DNA containing material which comprises plasmid DNA and genomic DNA, comprising the steps of:

- i. extracting the plasmid DNA into butanol by mixing the material with butanol, a chaotrope, and water under conditions to denature the genomic DNA, wherein the concentration of the chaotrope is about 0.9M; and
- ii. recovering the plasmid DNA from the butanol.

15 (Twice amended). The method of claim 1, wherein the recovery step (ii) comprises mixing the butanol phase, which comprises plasmid DNA, with a precipitating agent that can

precipitate the plasmid DNA from the butanol, and separating the precipitated plasmid DNA from the butanol.

21 (Twice amended). The method of claim 1, which further comprises a step of separating the butanol and aqueous phases of step (i) prior to recovering the plasmid DNA.

22 (Once amended). The method of claim 21, wherein the step of separating the butanol and aqueous phases further comprises centrifugation of the mixture formed in step (i) to facilitate separation of the mixture into the butanol and aqueous phases.

24 (Twice amended). An extraction mixture for selectively extracting plasmid DNA from genomic DNA in a DNA-containing material which comprises plasmid DNA and genomic DNA, which extraction mixture comprises butanol, a chaotrope, and water.

30 (Once amended). An extraction mixture for selectively extracting plasmid DNA from a DNA-containing material which comprises plasmid DNA and genomic DNA, which extraction mixture comprises butanol, a chaotrope, and water, wherein the butanol constitutes from 35 to 50 % of the extraction mixture.

31 (Once amended). An extraction mixture for selectively extracting plasmid DNA from a DNA-containing material which comprises plasmid DNA and genomic DNA, which extraction mixture comprises butanol, a chaotrope, and water, wherein the butanol constitutes about 42% of the extraction mixture.

34 (Twice amended). An extraction mixture for selectively extracting plasmid DNA from a DNA-containing material which comprises plasmid DNA and genomic DNA, which extraction mixture comprises butanol, a chaotrope, and water, wherein the concentration of chaotrope in the extraction mixture is from 0.7M to 1.2M.

35 (Once amended). An extraction mixture for selectively extracting plasmid DNA from a DNA-containing material which comprises plasmid DNA and genomic DNA, which extraction mixture comprises butanol, a chaotrope, and water, wherein the concentration of the chaotrope in the extraction mixture is about 0.9M.

37 (Once amended). A method for isolating plasmid DNA from genomic DNA in a DNA containing material which comprises plasmid DNA and genomic DNA, comprising the steps of:

- i. extracting the plasmid DNA into butanol by mixing the material with butanol, a chaotrope, and water under conditions to denature the genomic DNA and forming an aqueous phase and a butanol phase, wherein the genomic DNA is substantially in the aqueous phase and the plasmid DNA is substantially in the butanol phase; and
- ii. recovering the plasmid DNA from the butanol phase.--

Please add the following new claims 39-44:

--39 (New). The method of claim 1, wherein the chaotrope is present at a concentration of from 0.7M to 1.2M based on the combination of butanol, chaotrope and water.

40 (New). The method of claim 39, wherein the concentration of the chaotrope is about 0.9M.

41 (New). The extraction mixture of claim 29, wherein the butanol constitutes from 35 to 50 % of the extraction mixture.

42 (New). The extraction mixture of claim 41, wherein the butanol constitutes about 42% of the extraction mixture.

43 (New). The extraction mixture of claim 24, wherein the concentration of chaotrope in the extraction mixture is from 0.7M to 1.2M.

44 (New). The extraction mixture of claim 43, wherein the concentration of the chaotrope in the extraction mixture is about 0.9M.--